

A NEW GENUS AND SPECIES OF PSENINI
FROM THE SOUTHWESTERN DESERTS
(HYMENOPTERA, SPHECIDAE)

By KARL V. KROMBEIN¹

The curious little psenine wasp described below first came to my attention in the extensive material collected by W. R. M. Mason in the Colorado and Mojave Deserts during the spring of 1955. I am indebted to Dr. Mason of the Division of Entomology, Ottawa, Canada, for the opportunity to study some of the material collected by him. It is a pleasure to name this distinctive new species for him in recognition of his exhaustive collecting.

Ammopsen Krombein, n. gen.

Ammopsen appears to be more closely related to *Psen* than to any of the other recognized genera of Psenini. The venation of the hind wing is like that of *Psen*; that is, the transverse median vein is received by the median vein distad of the cubital vein. However, it differs from *Psen* and the other described genera in several characters of rather critical importance such as the incomplete occipital carina, lack of transverse dorsal carina on pronotum, lack of anterior carina on prepectus, anomalous position of first recurrent vein in forewing (received by first submarginal cell), lack of lateral carinae on female pygidium, and sixth sternum of male with a transverse row of fasciculate hairs near apex.

Diagnosis. Very small, the only known species 3.7–4.2 mm. in length. Mandible of female simple, of male with a slight inner tooth near apex; labrum short, broad, apical margin rounded; clypeus not thickened apically, the margin broadly rounded; front tuberculate between antennae; frontal carina lacking; occipital carina present dorsally only; female with several long, separated ammochaetae in a row along posterior margin of temple. Pronotum without a transverse dorsal carina; mesopleuron with prepectus rounded, not carinate anteriorly; propodeal enclosure not set off by marginal carinae; female with a comb on fore tarsus; posterior surface of hind femur with scattered short hairs; in forewing first recurrent vein received just proximad of first transverse cubital and second recurrent just distad of second transverse cubital, the second submarginal cell narrowed above, not receiving a recurrent vein; in the hind wing the transverse median vein received on

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median vein distad of cubital vein, the hamuli five in number, moderately separated from each other, the group located just beyond origin of radius. Petiole very short, about as long as hind coxa; pygidial area of female broad and almost flat, lateral carinae absent; sixth sternum of male with a transverse row of fasciculate hair near apex (treatment with KOH shows that this entire sclerite is densely covered with hairs which are longest across middle); seventh sternum of male with apex of median lobe truncate; eighth sternum of male terminating in a slender spine.

Type. *Ammopsen masoni* Krombein, new species.

***Ammopsen masoni* Krombein, n. sp.**

The small size and the characters listed in the generic discussion will serve to distinguish this species from any other known Nearctic psenine wasp. In addition, the dense, appressed silvery pubescence on much of head and thorax and the delicately rugulose-reticulate propodeal enclosure are not found elsewhere in our psenine fauna.

Unfortunately, no data are available on the biology of this species, but the temporal ammochaetae and tarsal pecten in the female indicate that it nests in the sand.

Type. Male; Thousand Palms, Riverside County, California; April 16, 1955 (W. R. M. Mason) [Division of Entomology, Ottawa, Canada].

Length 3.7 mm., forewing including tegula 2.3 mm. Shining, black, the abdomen light red except petiole and dark brown blotches on middle of fourth and most of fifth terga; the following white to creamy—mandible except apex, antenna beneath, tegula, apex of pronotal tubercle, narrow stripes on tibiae externally, tibial spurs, and tarsi except last segment. Wings hyaline, veins mostly testaceous.

Head width 1.3 times the height, the vertex rounded above eyes; clypeus, face and upper temples with dense appressed silvery pubescence obscuring the sculpture; apical margin of clypeus practically truncate; small, low tubercle between antennal insertions; ocelli small, in an equilateral triangle, the postocellar distance 1.1 times the ocellocular distance; occipital carina present dorsally only; antenna short, the flagellum clavate, the third to tenth flagellar segments becoming progressively more produced at apex beneath, the fourth, fifth and last segments concave beneath.

Dorsum of pronotum, mesopleuron except anterior face, post-scutellum, and dorsal and posterior faces of propodeum except enclosure with dense, appressed silvery pubescence; pronotum rounded dorsally, without transverse carina; scutum and scutellum

with small punctures separated from each other by a little more than the width of a puncture; enclosure of propodeum a broad triangle covering most of dorsum, very finely rugulose-reticulate, not margined by carinae; lateral propodeal surface granulate; posterior propodeal surface with a deep, narrow median sulcus.

First five abdominal terga on apical halves, and sterna, with thin, appressed silvery hairs, much sparser than on head and parts of thorax; petiole very short, no longer than hind coxa, not sulcate or carinate; anterior face of first tergum perpendicular to petiole.

Male paratypes range in length from 3.7 to 4.0 mm. They differ very little from the type in sculpture or pubescence, but the abdominal coloration is rather variable: half of them are colored as in the type, but four have the fourth and following terga infuscated, and one lacks any red on the abdomen. The extremes in variation are found in the Thousand Palms population. One male has a petiolate second submarginal cell.

Allotype. Female; same data as type except April 12, 1955.

Length 4.2 mm.; forewing, including tegula, 2.9 mm. Colored as in male except tarsi entirely pale and abdomen entirely red; pubescence also as in male. Other characters as in male except as follows: antenna short and clavate, the flagellar segments not produced beneath at apex; propodeal enclosure with weak transverse rugulae except basally where they radiate from base; fore femur with a few scattered long setae behind; pygidial area rather broad, the sides converging posteriorly at a 60° angle, the surface with small punctures separated by a little less than the diameter of a puncture and bearing inconspicuous decumbent setae, lateral margins straight but not carinate.

The female paratypes range in length from 3.6 to 4.1 mm. and are like the allotype except in two of them the last two terga are slightly infuscated and in another two the normally black areas of the legs are replaced by reddish.

Paratypes. 8 ♂♂; Thousand Palms, Riverside County, California; April 7 (1 ♂), April 15 (4 ♂♂), April 16 (2 ♂♂), April 26 (1 ♂), all 1955 (W. R. M. Mason). 3 ♀♀; Box Canyon, Riverside County, California; April 27, 1952 (P. H. Timberlake; on *Eriogonum thomasi*). 2 ♀♀; Blythe, Riverside County, California; April 24, 1955 (W. R. M. Mason). 1 ♂; 4.7 miles east of Bonds Corner, Imperial County, California; April 14, 1949 (P. H. Timberlake). 1 ♀; Borego, San Diego County, California; April 2, 1953 (P. D. Hurd). 1 ♀; same locality, but April 25, 1954 (M. Wasbauer; on *Croton californicus*). 2 ♂♂, 1 ♀; Helendale, San Bernardino County, California; May 27, 1955 (W. R. M. Mason).

3 ♂♂; 5 miles east of Deming, Luna County, New Mexico; September 13, 1957 (P. H. Timberlake and R. C. Dickson; on *Euphorbia fendleri*). Paratypes are in the collections of the U. S. National Museum, Cornell University, Division of Entomology at Ottawa, Canada, Citrus Experiment Station at Riverside, California, and California Insect Survey at Berkeley.

NOTES ON THE BUPRESTIDAE

By G. H. NELSON¹

This paper contains notes on some of the less common species of Buprestidae taken in Southern California during the past four years by the writer and others. Thanks are due Dr. R. L. Schultz, Messrs. D. S. Verity and R. L. Westcott for allowing the writer to include their captures in this paper and to Dr. John Roos who identified most of the plant material. Unless otherwise noted, the specimens were collected by the writer.

Polycesta crypta Barr, 1949, Amer. Mus. Nov. No. 1432: 32-34. Since no host data were available when this species was described, it seems worthy to note the capture of two female specimens. One was cut from *Arctostaphylos* sp. at Camp Angelus, San Bernardino Mts., Calif., May 2, 1958. The other was taken on *Ceanothus divaricata* at 4500 feet in the San Bernardino Mts., Calif., June 8, 1958.

Polycesta tularensis Chamberlin, 1938, Jour. N. Y. Ent. Soc. 46: 445.

Two females were taken by R. L. Schultz, one while beating *Fremontia californica* in the San Gabriel Mts., Calif., June 22, 1955, and the other emerged on June 13, 1958 from wood of *Fremontia* gathered in February of 1958. Since this species was formerly known only from northward extensions of the coast and inland mountain ranges, these records extend the known range of *tularensis* southward two hundred miles and fill the gap between the two mountain ranges.

Polycesta cazieri Barr, 1949, Amer. Mus. Nov. No. 1432: 36-39. Two males of this species were taken at Pine Valley, San Diego Co., Calif., July 10, 1958 where they were landing on the dead limbs of *Ceanothus perplexans*.

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